Atty Docket No.: MS306229.01/40062.217US01

PATENT

Express Mail No. EV 160768481 US

What is claimed is:

5

10

25

1. A method of accessing documents stored on a first computer system through a second computer system, the first and second computer systems connected in a network environment, said method comprising:

storing an identity information document from the first computer system, the identity information document comprising a user-friendly handle identifying a principal and a machine location for the first computer system;

intercepting a request for access to documents when the request is directed to the user-friendly handle;

replacing the user-friendly handle with the machine location; and sending request for access to documents to the machine location of the first computer system.

- 2. The method of claim 1 wherein the user-friendly handle comprises an email address.
 - 3. The method of claim 1 wherein the machine location comprises and IP address.
- 20 4. The method of claim 1 wherein the machine location comprises a public key.
 - 5. The method of claim 1 wherein the request for access to documents comprises a principal-initiated request.
 - 6. The method of claim 1 further comprising an initial step of receiving the identity information document from the first computer system.
- 7. A method of publishing documents between a plurality of nodes, the nodes connected in a network environment, said method comprising:

sending an identity information document from a publishing node to an accessing node, the identity information document comprising a user-friendly handle identifying a principal and a machine location for the publishing node;

storing the identity information document on the accessing node;

resolving the user-friendly handle with the machine location in a request for access to documents, wherein the request is made from the accessing node to the publishing node; and

sending the request for access to documents from the accessing node to the publishing node.

10

- 8. The method of claim 7 wherein the user-friendly handle comprises an email address.
- 9. The method of claim 7 wherein the user-friendly handle comprises a telephone number.
 - 10. The method of claim 7 wherein the machine location comprises an IP address.
- The method of claim 7 wherein the machine location comprises a public key.
- 12. The method of claim 11 further comprising:
 using the public key to determine the current machine location for the
 publishing node.
 - 13. The method of claim 11 further comprising:
 registering an encrypted machine name and a registered machine location
 for the publishing node with a DNS server;
 - resolving the user-friendly handle with the public key;

Atty Docket No.: MS306229.01/40062.217US01

Express Mail No. EV 160768481 US

converting the public key to the encrypted machine name;

using the encrypted machine name to look up the registered machine location for the publishing node on the DNS server; and

sending the request for access to documents to the registered machine

PATENT

5 location.

- 14. The method of claim 7 further comprising:
- verifying that the accessing node has authorization from the publishing node to review the requested documents before publishing the requested documents.

10

- 15. The method of claim 7 further comprising:
- delivering a path name for documents stored on the publishing node to the accessing node.
- 15 16. The method of claim 15 wherein the path name is delivered to the accessing node by email.
 - 17. The method of claim 7 further comprising:

 delivering a path name for documents stored on the publishing node to a
- 20 principal of the accessing node.
 - 18. The method of claim 17 wherein the path name is delivered to the principal of the accessing node by a telephone call.
- 25 19. The method of claim 7 wherein the resolving step further comprises: intercepting the request for access to documents when the request is directed to the user-friendly handle;

finding a matching identity information document having a user-friendly handle that matches the user-friendly handle in the request;

Atty Docket No.: MS306229.01/40062.217US01

Express Mail No. EV 160768481 US

determining the machine location from the matching identity information document; and

PATENT

amending the request to substitute the user-friendly handle with the machine location.

5

20. The method of 7 further comprising:

delivering a path name combined with the user-friendly handle to the accessing node; and

parsing the path name from the user-friendly handle prior to resolving the user-friendly handle with the machine location.

21. The method of claim 20 further comprising:

adding the path name to the request for access to documents before sending the request to the publishing node.

15

25

30

- 22. The method of claim 7 wherein the identity information document further comprises more than one machine location for principal identified by the user-friendly handle.
- 20 23. A method of using a user-friendly handle to access documents stored on a first computer system in a network environment, the method comprising:

storing an identity information document from the first computer system, the identity information document comprising a user-friendly handle identifying a principal and a machine location for the first computer system;

intercepting a request for access to documents in the form of the user-friendly handle;

amending the request to replace the user-friendly handle with the machine location; and

sending the amended request to access the documents to the machine location of the first computer system.

- 24. The method of claim 23 wherein the user-friendly handle is an email address.
- 5 25. The method of claim 23 wherein the machine location comprises an IP address.
 - 26. The method of claim 23 wherein the machine location comprises a public key.
- 27. The method of claim 26 further comprising:
 using the public key to determine the current machine location for the publishing node.
- The method of claim 23 further comprising an initial step of:
 receiving the identity information document from the first computer system.
- 29. The method of claim 23 further comprising the step of receiving published documents from the first computer system.
 - 30. A computer system comprising:

a storage module for storing an identity information document received from a second computer system, the identity information document comprising a userfriendly handle identifying a principal and a machine location for the second computer system; and

a name resolution module connected to the storage module for intercepting requests for access to documents stored at the user-friendly handle and amending the request to replace the user-friendly handle with the machine location.

25

- 31. The computer system of claim 30 wherein the user-friendly handle is an email address.
- 32. The computer system of claim 30 wherein the machine location comprises an IP address.
 - 33. The computer system of claim 30 wherein the machine location comprises a public key.
- 10 34. The computer system of claim 30 further comprising:

 a communication module connected to the name resolution module for sending and receiving communications to and from the second computer system.
- 35. A computer readable medium encoding a computer program of
 15 instructions for executing a computer process for name resolution, said computer process comprising:

storing an identity information document from a publishing computer system, the identity information document comprising a user-friendly handle identifying a principal and a machine location for the publishing computer system;

intercepting a request for access to documents stored on the publishing computer system, wherein the request contains the user-friendly handle; and amending the request to replace the user-friendly handle with the machine location.

- 25 36. The computer process of claim 35 wherein the user-friendly handle comprises an email address.
 - 37. The computer process of claim 35 wherein the machine location comprises an IP address.

- 38. The computer process of claim 35 wherein the machine location comprises a public key.
- 39. The computer process of claim 38 further comprising:
 using the public key to determine the current machine location for the publishing node.
- 40. The computer process of claim 38 further comprising:

 registering an encrypted machine name and a registered machine location

 for the publishing node with a DNS server;

resolving the user-friendly handle with the public key;
converting the public key to the encrypted machine name;
using the encrypted machine name to look up the registered machine
location for the publishing node on the DNS server; and

sending the request for access to documents to the registered machine location.

- 41. The computer process of claim 40 wherein the converting step comprises performing an algorithm on the public key.
- 42. The computer process of claim 35 wherein the identity information document further comprises more than one machine location for principal identified by the user-friendly handle.

25

15

20